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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/766,220	01/28/2004	Jethro Liou	46858.00023	2893
7590 01/12/2005			EXAMINER	
Squire, Sanders & Dempsey L.L.P.			PASSANITI, SEBASTIANO	
14th Floor 801 S. Figueroa Street			ART UNIT	PAPER NUMBER
Los Angeles, CA 90017-5554			. 3711	
			DAME MAIL ED 01/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/766,220	LIOU, JETHRO				
Office Action Summary	Examiner	Art Unit				
	Sebastiano Passaniti	3711				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on see detailed Office action.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	·	•				
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5)  Notice of Informal Pa 6) Other:	te atent Application (PTO-152)				

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## **DETAILED ACTION**

This Office action is responsive to communication received 01/28/2004 – application papers filed; 08/20/2004 – Oath and Request for Extension of Time.

Claims 1-11 are pending.

Following is an action on the MERITS:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lo. As to claim 1, Lo shows a metallic assembly comprising a sole, face, top and hosel along with a composite cover (12, 14). The composite cover(s) and the metallic assembly are bonded together to form a completed club head assembly. As to claim 3, the covers (12, 14) may comprise graphite-epoxy material (col. 3, lines 1-3). As to claims 5 and 6, the metallic assembly may comprise stainless steel or other durable material (col. 2, lines 52-54).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lo in view of Liang and Wood. Lo differs from the claimed invention in that Lo does not show two

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openings in a rear portion of the sole plate. Each of Liang and Wood show it to be old in the art to include a metallic shell in which the sole or rear portion includes plural openings. Applicant's construction including two holes in the rear of the sole mimics the concept of lattice-type structures displayed by both Liang and Wood. This arrangement, as best explained by Wood (col. 2, line 55 through col. 3, line 4) provides the club maker with the ability to enlarge the volume of the club head without sacrificing structural integrity of the outer shell. In addition, the weight distribution of the head may be desirably readjusted by filling the voids or openings with materials that are less dense than the materials that make up the remainder of the shell body. In view of the patents to Liang and Wood and the above reasoning, it would have been obvious to modify the device in the cited art reference to Lo by including two openings in the rear of the sole, much like the two openings in the crown, the motivation being to assist with the distribution of the head weight.

Claims 4, 7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo in view of Su. Lo differs from the claimed invention in that Lo does not specifically detail a construction technique in which the diverse shell pieces are formed and subsequently welded together or an assembly in which the covers of the crown assembly are bonded to the remainder of the club head assembly. Su shows it to be old in the art to fabricate a hollow metallic club head from multiple pieces that are later joined using any one of a number of convenient and well-known processes such as welding, epoxying or screwing (col. 5, lines 39-48). In essence, Su teaches that it is old to combine both metallic and composite materials within the construction of the shell of

15、日子内内的成功的,特殊的1500m,1990年被撤入了。4、通数减少数300m,并不会实现的现在分词,1600m的。1500m。

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a golf club head. In view of the patent to Su, it would have been obvious to modify the device in the cited art reference to Lo by bonding the composite covers to the top portion of the head, while separately forming the remaining sole, face, top and hosel pieces, said pieces later to be joined by welding, the motivation being to simply make use of conventional methods in the art for fixedly securing diverse elements of the club head assembly. Note, regarding claim 7, the claim requires that either the top or sole includes at least one opening and that the composite cover is designed to cover at least the opening and portions of the sole plate. One can see from a review of Figure 4 in Lo (extreme right side, near numeral 24) that the cover (30) covers at least a portion of the rear of the sole assembly, much in the same way that applicant has displayed the manner in which the claimed cover is fitted over the rear of the sole.

Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Lo in view of Su, Ling and Wood. Lo in view of Su has been detailed above. Lo, as modified, differs from the claimed invention in that Lo does not show two openings in a rear portion of the sole plate. Each of Liang and Wood show it to be old in the art to include a metallic shell in which the sole or rear portion includes plural openings. Applicant's construction including two holes in the rear of the sole mimics the concept of lattice-type structures displayed by both Liang and Wood. This arrangement, as best explained by Wood (col. 2, line 55 through col. 3, line 4) provides the club maker with the ability to enlarge the volume of the club head without sacrificing structural integrity of the outer shell. In addition, the weight distribution of the head may be desirably readjusted by filling the voids or openings with materials that are less dense than the materials that

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make up the remainder of the shell body. In view of the patents to Liang and Wood and the above reasoning, it would have been obvious to modify the device in the cited art reference to Lo by including two openings in the rear of the sole, much like the two openings in the crown, the motivation being to assist with the distribution of the head weight.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mader shows a composite cover (20). Note crown portion (14b) in Hoshi. Cover (40) in Chen ('086) is formed of composite material. The three publications to Nakahara ('692, '693, '127) show a composite cover element, of interest. The publications to Shiell ('207, '208) show covers in the crown area, of interest. Cheng and Onoda show composite top covers (20) and (11), respectively. Chen ('608) and Kumamoto show crown portions formed of composite material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-272-4413. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sebastiano Passaniti Primary Examiner Art Unit 3711

S.Passaniti/sp January 8, 2005